

E85 Vehicle Zip Code Locations in Washington

Ethanol is an odorless, colorless, volatile liquid, formed by the fermentation of sugars. Also known as ethyl alcohol or grain alcohol, ethanol is an excellent motor fuel which can be produced domestically, provides low vehicle emissions, and reduces the use of imported oil.

In the U.S., fuel ethanol is mainly produced from corn grown in the Midwest. A bushel of corn (approximately 56 pounds) yields about 2.7 gallons of ethanol. Ethanol can also be produced from a variety of materials which contain starch or sugar, including grains, sugar beets, sugar cane, agricultural and food wastes and cellulosic materials. Currently, the production capacity of ethanol plants operating in the U.S. exceeds 4.5 billion gallons per year.

While a vehicle powered by 100% ethanol is possible, fueling these vehicles would be difficult due to the limited availability of ethanol fueling stations. Instead automakers are manufacturing vehicles capable of operating on both gasoline and ethanol fuel. These vehicles are called flexible fueled vehicles (FFVs) and can operate on a wide blend of ethanol and gasoline; from 0% ethanol and 100% gasoline, up to 85% ethanol and 15% gasoline. This latter blend is called E85 and is the standard fuel for FFVs.

To date, there are approximately 6 million E85 compatible vehicles operating in the U.S. These vehicles are similar to gasoline vehicles; their main difference is in the fuel management system and modifications to the engine calibration system. In fact, most consumers do not even know if they own an FFV, as the vehicle looks and drives the same as an equivalent gasoline powered model.

FFVs are fully warranted and available at no extra cost to the consumer. For a list of E85 vehicles available for purchase, visit http://www.eere.energy.gov/afdc/afv/eth_vehicles.html, or contact your local auto dealer. To determine if the vehicle you currently own is E85 compatible, go to <http://www.e85fuel.com/index.php>. This site describes the process for determining whether your vehicle is E85 compatible by examining the vehicle identification number or VIN.

In Washington State, there are approximately 101,800 FFVs registered with the Department of Licensing. These vehicles are located throughout the state and include all makes and models. In contrast, there are only four E85 fueling stations located in the state, and only one of these is available to the general public. This station is operated by Pacific Pride and is located in Richland, WA. For information on this site and other E85 stations go to <http://www.e85fuel.com/database/search.php>.

Increasing the number and availability of E85 fueling stations is an important step to expanding the use of biofuels in Washington State. As part of this effort, the Washington State University Energy Program, in cooperation with the Energy Policy Division of the Washington State Department of Community, Trade and Economic Development, developed the following vehicle database and selected maps showing E85 vehicle concentrations within state zip code areas. This information should help prospective retail fuel providers identify opportunity areas for installing E85 refueling stations. The data was developed with the assistance of the Department of Licensing and is based on resident vehicle registrations for the State of Washington.